

REMARKS

This is a full and timely response to the Office Action mailed March 25, 2003 (Paper No. 3). Reexamination and reconsideration in light of the following remarks is respectfully solicited.

Claims 1-10 and 12-23 are now pending in the application, Claim 11 having been canceled consonant with an oral election that was made during a previously imposed telephone restriction requirement. Claims 1, 12, 16, and 17 are the pending independent claims.

Drawings

The drawings were objected to as allegedly failing to comply with 37 C.F.R. 1.84(a). Specifically, the Office Action alleges that the structure recited in Claim 13, namely "wherein the first means . . . a ring," is not shown in the drawings. In response, Applicants wish to point out that at least FIGS. 3 and 5-7 show the end cap hats (190) and that FIG. 8 shows a ring (495) that may also function as an end cap. This latter configuration is also described in paragraph [0036] of the instant application.

Hence, Applicants submit that the originally-filed drawings fully comply with all the provisions of 37 C.F.R. 1.84, and reconsideration and withdrawal of the drawing objections is therefore respectfully requested.

Rejections Under 35 U.S.C. 102(b)

Claims 1, 5, 6, 8-10, 12-18, and 21-23 stand rejected under 35 U.S.C. § 102 (b) as allegedly being anticipated by U.S. Patent No. 5,666,016 (Cooper). This rejection is respectfully traversed.

Independent Claim 1 relates to a rotor for use in a high speed generator that includes a shaft, a plurality of spokes extending radially from the shaft, and a plurality of supports each positioned proximate one of the spokes, and recites, *inter alia*, a plurality of coils of wire windings, each wrapped around a respective one of the supports and a respective one of the spokes.

Independent Claim 12 relates to a generator that includes a rotor having a shaft, a plurality of wire coils supported away from the shaft of the rotor by a plurality of appendages, first means for preventing outward radial movement of wires of the wire coils beyond respective outer limits, and second means for preventing inward radial movement of wires of the wire coils

beyond respective inner limits, and recites, *inter alia*, wherein at least one of the first means and second means is secured to the plurality of appendages.

Independent Claim 16 relates to an end cap device for implementation in a rotor including an appendage extending outward radially from a shaft of the rotor and further including a support positioned on the appendage, and recites, *inter alia*, a first fastening element by which the end cap device is coupled to the appendage.

Independent Claim 17, relates to a method of retaining wires of a coil within a desired region relative to a rotor shaft that includes positioning at least one of a support and an additional element on a first appendage extending radially from the shaft, and recites *inter alia*, wrapping the wires of the coil onto the support.

Cooper relates to a winding support for a brushless generator rotor. The Office Action alleges that the configuration of the winding retainer (40) disclosed in Cooper corresponds to that of the support recited in independent Claims 1 and 17, and to that of the second means recited in independent Claim 12. The Office Action further alleges that the configuration of the support member (36) disclosed in Cooper corresponds to that of the first means recited in independent Claim 12, and to that of the end cap device of independent Claim 16. For at least the following reasons, Applicants submit that this interpretation of Cooper is erroneous.

First of all, Cooper fails to disclose, or even remotely suggest, at least the above-noted feature of independent Claim 1. Namely, Cooper fails to disclose a plurality of coils of wire windings, each wrapped around a respective one of the supports and a respective one of the spokes. As disclosed at least in FIG. 13, none of the windings (27) are wrapped around the winding retainer (40); rather, it is the winding retainer (40) that surrounds the windings (27). Consistent with this, Applicants further submit that Cooper fails to disclose or suggest the step of wrapping the wires of the coil onto the support, as recited in independent Claim 17. Indeed, Cooper discloses a step that is exactly the opposite - placing the winding retainer (40) around the windings (27).

With respect to independent Claims 12 and 16, Applicants submit that Cooper fails to disclose, or even remotely suggest, either of the above-noted features recited in these independent claims. Specifically, Cooper fails to disclose or suggest that either the alleged first means (e.g., support member 36) or the alleged second means (e.g., winding retainer 40) are secured to the plurality of appendages, as recited in independent Claim 12. Moreover, Cooper

fails to disclose or suggest a first fastening element by which the end cap device is coupled to the appendage, as recited in independent Claim 16. Although Cooper discloses that the winding retainer (40) is secured to the support member (36), neither of these structures is secured to any portion of the rotor. Nor does the support member (36) include a fastening element to couple it to an appendage (or any other structure for that matter). Instead, each support member (36) is placed over a separator member (32) (col. 3, ll. 45-55). The winding retainer (40) is then fastened to the support member (col. 3, ll. 63-64), and a retention band (50) is then placed around each support member (36) (col. 4, ll. 26-28).

Applicants wish to point out that the above remarks do not constitute a concession or admission that the support member (36) and winding retainer (40) are not equivalent structure to the first means and second means, respectively. Just that neither of these structures is secured in the manner recited in independent Claim 12.

In view of the above, Applicants respectfully solicit reconsideration and withdrawal of the § 102(b) rejection.

Rejections Under 35 U.S.C. § 103

Claims 4, 7, 19, and 20 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over Cooper, and Claims 2 and 3 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over Cooper and U.S. Patent No. 5,780,951 (Stephens). These rejections are respectfully traversed.

With respect to Claims 4, 7, 19, and 20, Cooper, as was noted above, fails to disclose or suggest at least one feature recited in each of independent Claims 1 and 16. Hence, Cooper cannot render obvious any claims which depend from these independent claims. With respect to Claims 2 and 3, while not conceding that Stephens discloses or suggests what is proffered in the Office Action, it is nonetheless submitted that this citation fails to make up for at least the noted deficiency of Cooper with respect to independent Claim 1. Namely, Stephens also fails to disclose or suggest a plurality of coils of wire windings, each wrapped around a respective one of the supports and a respective one of the spokes. Hence, Stephens cannot render obvious these dependent claims.

In view of the foregoing, reconsideration and withdrawal of each of the § 103 rejections is respectfully requested.

Conclusion

Based on the above, independent Claims 1, 12, 16, and 17 are patentable over the citations of record. The dependent claims are also submitted to be patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicants submit that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

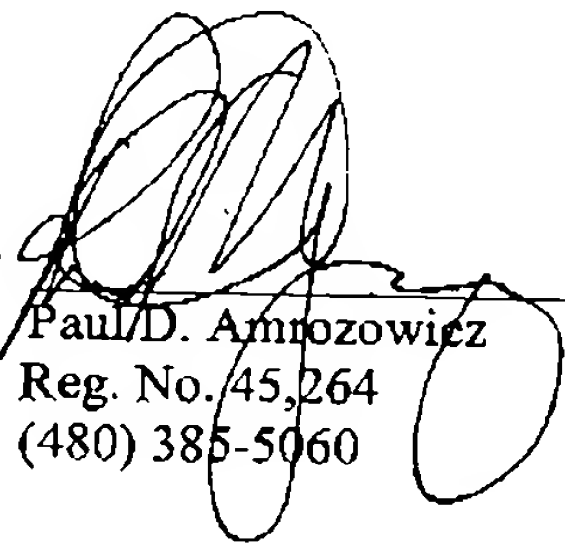
If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

Dated: May 30, 2003

By:


Paul D. Amrozowicz
Reg. No. 45,264
(480) 385-5060

Ingrassia Fisher & Lorenz
Customer No. 29906